

Scaled data based on original data using  
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge or  
Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: LUMIERE

Report Number:

Luminaire Tested: **1407-75MR16-12-FL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number:  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMIERE  
Catalog Number: 1407-75MR16-12-FL  
Description:  
Light Source: Q75MR16/C/FL40°-EYC  
BARE LAMP DATA FOR 1407  
Ballast/Driver: -

**Summary**

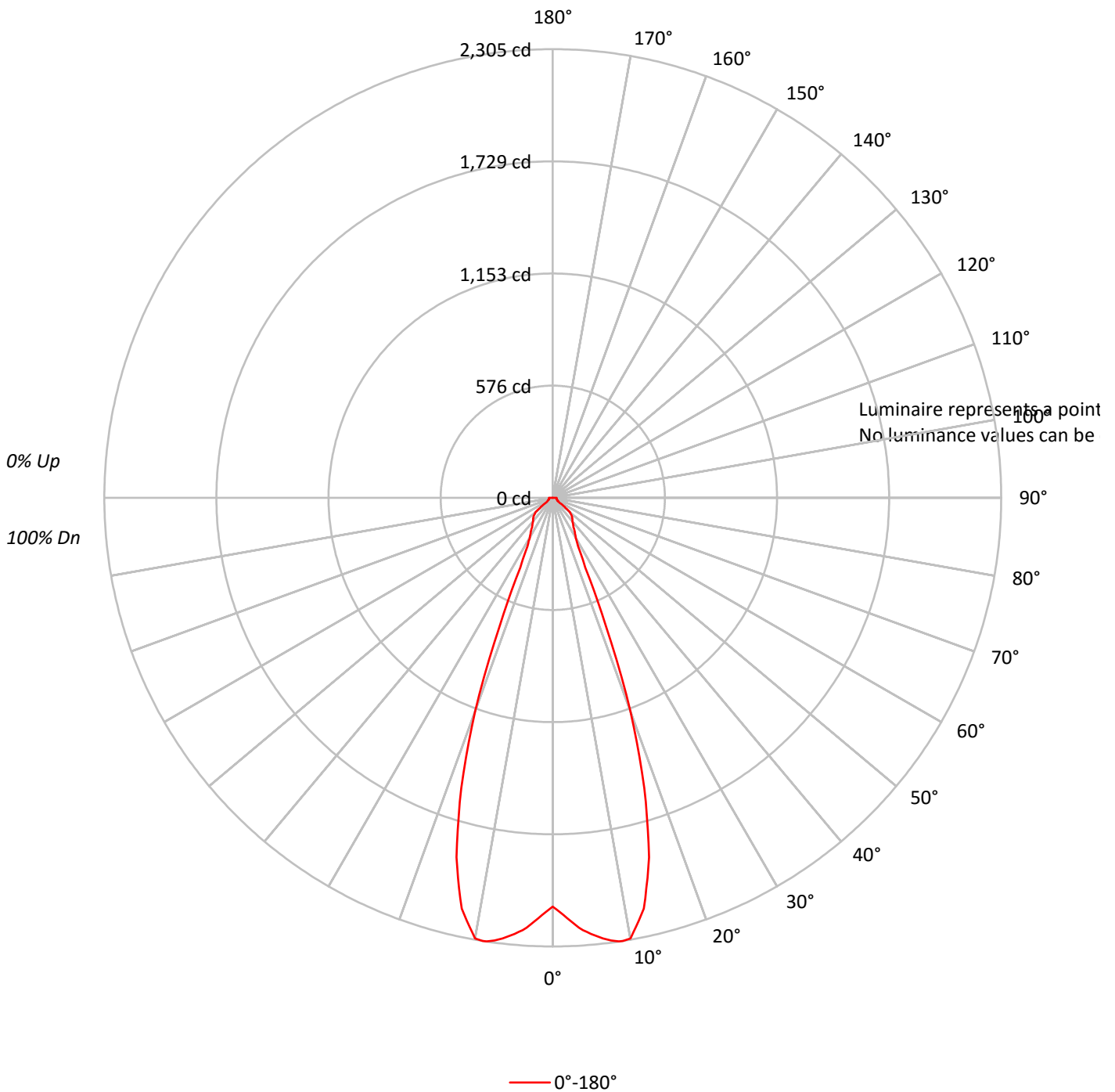
Lumens per Lamp: 1330 (1 lamp)  
Luminaire Lumens: 1294.5 lumens  
Efficiency: 97.3%  
Efficacy: -  
Spacing Criteria (0/90/45): 0.71 / 0.71 / 0.59  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

Input Watts (W): 0  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	116	116	116	116	113	113	113	113	108	108	108	104	104	104	99	99	99	97
1	110	107	104	102	107	105	102	100	101	99	97	97	95	94	94	92	91	89
2	104	99	95	91	102	97	94	90	94	91	88	91	89	87	89	87	85	83
3	99	93	88	84	97	91	87	83	89	85	82	86	83	80	84	81	79	78
4	94	87	82	77	93	86	81	77	84	79	76	82	78	75	80	77	74	73
5	90	82	76	72	89	81	76	72	79	75	71	78	74	71	76	73	70	69
6	86	78	72	68	85	77	72	68	75	71	67	74	70	67	73	69	66	65
7	82	74	68	64	81	73	68	64	72	67	64	71	66	63	70	66	63	62
8	79	70	65	61	78	70	64	61	69	64	60	68	63	60	67	63	60	59
9	76	67	62	58	75	67	61	58	66	61	58	65	60	57	64	60	57	56
10	73	64	59	55	72	64	59	55	63	58	55	62	58	55	61	58	55	54

**AVERAGE LUMINANCE (cd/sqm):**





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	216.5	16.7	16.3
10°-20°	505.8	39.1	38.0
20°-30°	229.7	17.7	17.3
30°-40°	119.4	9.2	9.0
40°-50°	107.1	8.3	8.1
50°-60°	49.0	3.8	3.7
60°-70°	24.3	1.9	1.8
70°-80°	20.9	1.6	1.6
80°-90°	21.8	1.7	1.6
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	952.0	73.5	71.6
0°-40°	1071.4	82.8	80.6
0°-60°	1227.5	94.8	92.3
0°-90°	1294.5	100.0	97.3
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	1294.5	100.0	97.3

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2100	
5°	2249	217
15°	1912	506
25°	395	230
35°	186	119
45°	141	107
55°	38	49
65°	24	24
75°	19	21
85°	20	22
90°	20	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2100
1.25°	2137
2.5°	2179
3.75°	2221
5°	2249
6.25°	2274
7.5°	2294
8.75°	2307
10°	2299
12.5°	2162
15°	1912
17.5°	1564
20°	1170
22.5°	710
25°	395
27.5°	283
30°	236
35°	186
40°	157
45°	141
50°	116
55°	38
60°	29
65°	24
70°	21
75°	19
80°	20
85°	20
90°	20

(END OF REPORT)